

at the tibio-tarsal articulation; belly areolate. Pale brownish above, with a large cross-shaped (✠) marking from between the eyes to the sacral region; a dark canthal streak; upper lip with vertical dark bars; limbs with very sharply defined oblique dark brown cross-bars; lower parts brownish, much marbled with dark brown.

From snout to vent 19 mm.

A single specimen from Pervenir, Bolivar, 5800 feet.

LIII.—*New Species of Cladophyllia, Prionastræa, and Styliina.* By J. W. GREGORY, D.Sc., F.G.S.

1. *Cladophyllia Birleyæ*, sp. n.
(From the Atherfield Clay.)

A few years ago Miss Birley lent me a coral which had been collected by herself and Miss Copeland from the Atherfield Clay of the Isle of Wight. A section was cut, but showed no trace of internal structure; and Miss Birley kindly allowed me to retain the specimen until a more convenient time. Some further sections have recently been prepared, and they fortunately show the structure and affinities of the coral.

Diagnosis.—Corallum a large crowded hemispherical tuft. The branches are cylindrical, fairly thick, and sinuous; they dichotomize repeatedly. Calices circular, shallow.

Septa coarsely dentate, and some appear to be slightly cribriform. The septa occur in four complete cycles. One septum is continued across the centre of the corallite, where it expands; in some corallites trabeculæ from other septa unite with this larger septum, giving the appearance of a parietal columella. Dissepiments scanty.

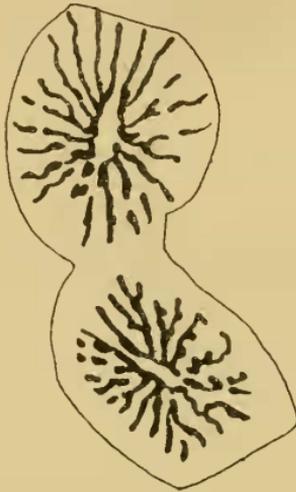
Dimensions.—

Diameter of corallum . . .	75 by 85 mm.
Height " " . . .	50 mm.
Diameter of corallite . . .	3-5 "
" " calice . . .	2 "
Depth " " . . .	1 "
Number of septa . . .	Up to 48

Distribution.—Atherfield Clay, Atherfield, Isle of Wight.
Coll. Miss Birley.

Affinities.—This species is most nearly allied to *Cladophyllia crassilamella*, From.*; from the Neocomian of Morancourt. From that form it differs by having more numerous

Fig. 1.

Transverse section across two corallites. $\times 6$ diam.

septa, and especially by the coarse dentation of the septa. The strong "columellar septum" is similar to that of *Pleurosmilia*.

2. *Prionastraea Vaughani*, sp. n.
(From the Eocene of Alabama.)

Diagnosis.—Corallum subarborescent, in simple cylindrical branches. Walls thin. Calices deep, elliptical in shape. Rims distinct, separated by shallow grooves. Corallites mostly pentagonal; occasionally quadrangular or hexagonal.

Septa about five orders, of which two or three unite with the large columella. The septa are dentate; on the upper margin and laterally they are covered by short sharp spines.

Dimensions.—

Diameter of branch	17 mm.
" corallite	4-5 "
" columella	1.5 "
Depth of the calice	2 "

* E. de Fromental, Pal. franç. Terr. cré., Zooph. pt. 8, 1870, pl. xciii. fig. 1, pt. 9, 1873, p. 417.

Distribution.—Eocene, Huntsville, Alabama. Coll. Brit. Mus., R. 4146.

Fig. 2 a.

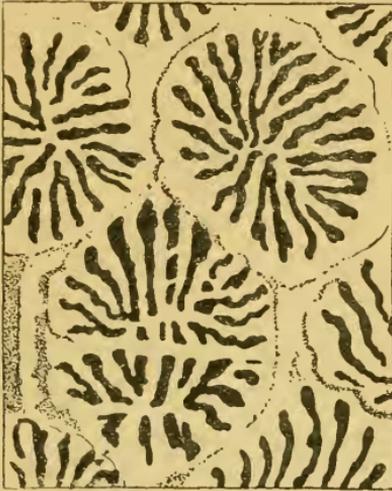


Fig. 2 b.

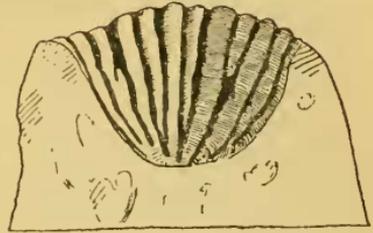


Fig. 2 a.—Part of the surface, showing one corallite undergoing fission. $\times 6$ diam.

Fig. 2 b.—A corallite from the side. $\times 6$ diam.

Affinities.—My attention was called to this species by Mr. T. Wayland Vaughan, of the United States Geological Survey, who noticed it while examining the American Cainozoic corals in the British Museum. The coral was new to him, but he had not time to describe the species. The Museum records state that the specimen came from Alabama. Mr. Vaughan informs me that the precise locality is no doubt Huntsville. A section has recently been cut across the coral, which shows that it belongs to the genus *Prionastræa*, as the corallites are directly united by their walls. It therein differs from *Favia*, which it resembles by the occasional growth and fission.

Its nearest ally is probably *Prionastræa confertissima* (Rss.)*, from Castalgomberto, in which fission is more frequent and the calices less regular in shape.

* *Favia confertissima*, von Reuss, Anth. Castalg., Denk. Akad. Wiss. Wien, vol. xxviii. 1868, p. 152, pl. viii. fig. 5.

3. *Stylina Collinsi*, sp. n.
(From the Mexican Neocomian.)

Diagnosis.—Corallum massive ; irregularly nodular ; broad based ; taller than thick.

Cœnenchyma variable in width from a mere film to a band as wide as the corallites. The surface is either marked by the confluent costæ or it is smooth or granular between raised calicular margins.

Septa thin, in 2 or 3 cycles. The symmetry is octamerale. Columella stout, usually appearing as a well-raised knob.

Dimensions.—

Corallum 50 mm. thick by 60 mm. high by 90 mm. long.

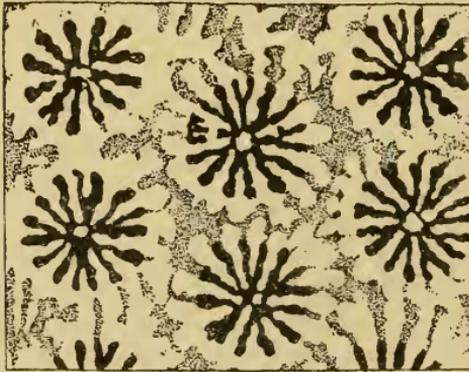
Diameter of corallites 1·5–2 mm.

Average distance of calicular centres . . . 3–3·5 „

Distribution.—Neocomian. From limestone half a mile from the quicksilver mine at La Trinidad, 4 miles from the town of Guadalcazar, State of San Luis Potosi, Mexico, alt. 6500 feet.

Collected by Mr. H. F. Collins, who has kindly presented half of the specimen to the British Museum (Nat. Hist.).

Fig. 3.



Part of surface of the specimen with six calices. × 6 diam.

Affinities.—This coral is a member of the octamerale group of *Stylina*. Its nearest ally is *Stylina pachystylina*, Koby*, from the Swiss Urgovian. In all probability the two corals are geographical varieties, but with the available material it is unsafe to identify them as the same species. The Mexican

* Koby, Mon. Polyp. crét. Suisse, pt. i. 1896, p. 26, pl. v. fig. 6.

coral differs by having narrower intercalicular areas and much stouter costæ and frequently a raised calicular rim. Dr. Felix * does not quote any coral under the name of *Stylina* from the Neocomian of Puebla; but he describes a species as a *Cryptocænia*, which, however, is probably a *Cyathophora*.

LIV.—*Description of Conus* (Cylinder) *clytospira*, *sp. n.*, from the Arabian Sea. By JAMES COSMO MELVILL, M.A., F.L.S., and ROBERT STANDEN.

Conus (Cylinder) *clytospira* †, *sp. n.*

C. testa magna, elegantissime attenuato-cylindrica, lævi, parum nitida, alba, brunneo-, castaneo- vel ochraceo-reticulata et maculata, sicut in C. aulico vel C. episcopo, spira mire conspicua; anfractibus sedecim, pulchre gradatis, infra suturas excavatis, angulatis, deinde rectis, quorum novem supernis, sub lente spiraliter scalptis, parvis, albidis, in medio angulatis, ad angulum minute albi-nodulosis, ultimo anfractu pergracili, attenuato, ad basin leniter producto, spiraliter interrupte bi- vel trifasciato; apertura angusta, contracta, labro tenui, supra, apud suturam, late excavato; columella recta.

Long. 119, lat. 37 mm. (sp. maj.).

„ 108, „ 33 „ (sp. min.).

Hab. Arabian Sea, about 125 miles W.S.W. of Bombay, long. 71° 30' to 71° 45' E., lat. 18° 43' N., adhering to the submarine cable of the Eastern Telegraph Co.; hauled up from 45 fathoms (*F. W. Townsend, Esq.*).

The dredging of this remarkable textile cone undeniably constitutes one of the most important discoveries of the kind during the nineteenth century. It will rank amongst the most select of a genus unusually distinguished in both form, texture, and coloration. In form, indeed, it is more gracefully attenuate than its nearest ally, *C. gloria-maris*, Chemn., but in the latter characteristic, viz. coloration and pattern of marking, it more assimilates *C. aulicus*, L., or *episcopus*, Hwass, being twice or thrice interruptedly spirally banded on the last whorl, with coarse, widely spread reticulations enclosing oblong, obtusely triangular, or trapezoid spaces of varying dimensions.

* J. Felix, "Verst. mexican. Jura- u. Kr.-Form.," Palæontogr. vol. xxxvii. 1891, p. 154, pl. xxiv. figs. 5, 5 a-b.

† κλύτος, illustrious, σπείρα, spire.